



Case Study health application development:

Getting started on the digital foot: early-stage strategy with a NB health system development business

Timeline: January 2021 – April 2021

Challenge:

The Fredericton-based start-up that is developing devices to minimize the risk of concussions and identify concussions in early stage, through a mixture of hardware and software solutions. A start-up that emerged from work conducted at UNB Fredericton.

Their main challenges in digitization are:

- the massive integration of data from several hardware sensors from different vendors into a data collection lake (getting all of the data in one place, in one format in a secure location to be able to apply analytics to the data lake).
- the significance and high privacy concerns of health-related data.

Digital strategy:

The main goal of the strategy was to build a Health Canada-compliant data lake that could be mined with analytics.

The strategy developed a concept for all data streams and development guidelines to fulfill all regulations, as well as meet a privacy-by-design approach. Our work included:

1. Identifying all involved data points and where they were coming from
2. Identifying all data types and amounts of data
3. Involving UNB for cybersecurity concepts, based on Health Canada regulations
4. Designing guidelines for developers that included naming rules and documentation templates
5. Recommending systems to start implementation

Outcome:

In 4 months, we delivered the guidelines for the data lake, including cybersecurity recommendations, and developer guidelines. The client selected our recommended system and began implementation.